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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,738	12/17/2001	Yasuhiko Suzuki	1155-0234P	1181

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EXAMINER
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LEE, RIP A

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 01/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

10/009,738

Applicant(s)

SUZUKI ET AL.

Examiner

Rip A. Lee

Art Unit

1713

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 01 December 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.  
2. ☒ The proposed amendment(s) will not be entered because:  
(a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ they raise the issue of new matter (see Note below);  
(c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_.

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.  
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.  
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 1, 2 and 4.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8. ☐ The drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.  
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.  
10. ☒ Other: attachment to advisory action

*Attachment to Advisory Action*

An after final response was filed on December 1, 2003. Claim 3 was canceled. A proposal to amend claim 1 to recite "consisting essentially of" was submitted, however, such an amendment would not place the application in condition for allowance.

Applicants submit that the prior art neither teaches nor suggests the subject matter of the present claims. The outstanding rejection contains two aspects to contend with. First, is the transition metal component. As indicated previously, the prior art describes a process for polymerization of olefins using a catalyst that contains transition metals having structures consistent with those described in the present claims. In fact, the patent provides over eighty structures of imine-containing complexes shown on pages 12, 14, 15, 17, and 26.

The second aspect of the invention is the combination of co-catalysts. The present application requires an organoaluminum (B-1), and a compound (B-2) which reacts with the transition metal complex to form an ion pair.

JP 11-199592 recites use of at least one compound selected from an organometal compound, an organoaluminum oxy compound, and a compound which reacts with the transition metal compound to form an ion pair.

The issue here is whether use of an organoaluminum and a compound which reacts with transition metal compound is indeed taught by the prior art. In other words, based on the Markush language offered in the patent, would one select use of more than one Markush element, and if so, would one select the particular combination of organoaluminum and a compound which reacts with a transition metal component.

Turning to the teachings in the examples section, one notes that Example 5 illustrates a catalyst containing the combination of *i*Bu<sub>3</sub>Al and [Ph<sub>3</sub>C][B(C<sub>6</sub>F<sub>5</sub>)<sub>4</sub>]. Indeed, such a combination is an aspect of the invention.

Applicants have used Example 5 to rebut the rejection stating that the transition metal component is not consistent with that shown in the present claims. One immediately realizes that the metal complex is quite different, and that is why Example 5 was cited merely to show that use of *i*Bu<sub>3</sub>Al and [Ph<sub>3</sub>C][B(C<sub>6</sub>F<sub>5</sub>)<sub>4</sub>] is taught in the prior art.

As indicated in the final rejection, use of a catalyst consisting essentially of an imine-containing complex with *i*Bu<sub>3</sub>Al and [Ph<sub>3</sub>C][B(C<sub>6</sub>F<sub>5</sub>)<sub>4</sub>] flows naturally from the teachings of JP 11-199592.

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The two declarations have been reviewed. Applicants contend that the prior art does not teach use of organoaluminum component as a reducing agent. The article by Marks was submitted to show that organoaluminum compounds are used conventionally as co-catalysts, not as reducing agents. However, this does not detract from the fact that the prior art teaches each component recited in the present claims. Furthermore, the motivation provided in the prior art does not have to be the same as that of the Applicants. *In re Kemps* 97 F.3d 1427, 1430, 40 USPQ 2d 1309, 1311 (Fed. Cir. 1996).

The Applicants call attention to the examples in the specification. Here, Me<sub>3</sub>Al was shown to be ineffective as a reducing agent, but use of *i*Bu<sub>3</sub>Al results in an effective catalyst. The examiner notes that JP 11-199592 recites use of *i*Bu<sub>3</sub>Al as well.

Applicant's "Experiment A" shows that polymerization using a catalyst containing the vanadium complex exhibits higher activity at 50 °C compared with a polymerization at 25 °C (conditions used in Example 5). It is not clear what else the experiment is meant to show. Applicants assert that the results show that examiner's "best combination" is not the result of an obvious choice, but instead, the result of an unobvious choice. This would be true had the use of the vanadium complex of Example 5 been cited in the rejection. However, it was not. The "best combination" would appear to be an imine-containing transition metal component, an organoaluminum compound, and a compound which reacts with a transition metal compound, and such an embodiment lies in the teachings of 11-199592.

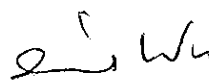
In view of the discussion above, the rejection of record has not been withdrawn.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (703)306-0094. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (703)308-2450. The fax phone number for the organization where this application or proceeding is assigned is (703)746-7064. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

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December 18, 2003



DAVID W. WU  
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